Kelley Brown
Director, Quality Assurance

Counterfeit Mitigation

June 16, 2014

Current State of the Industry

- Counterfeit materiel, especially semiconductors, continue to work their way into the supply chain and the effects can be devastating.
- As the volume of legitimate sales increase, likewise the volumes of counterfeits increase.
- It’s a given that the lowest risk is to purchase only from Original Component Manufacturers (OCM) or their Authorized Distributors (AD).
- OCM/AD purchasing secures both a

Major Problem Identified…

- Avnet is addressing the counterfeit problem head-on. We are 100% committed to counterfeit mitigation. We have consulted with industry experts throughout the supply chain. Our analyses identified a weakness in the distribution channel, both authorized and independent, and that weakness is product that has been returned from the field. As a result, Avnet implemented a major change in our system in order to shore up our defense.

… and Solved

- **Avnet has created a standing policy of segregating returned materials and we do not ship those parts to Defense and Aerospace customers without a waiver.**

- This policy blocks the most likely opportunity for discrepant material to enter the Authorized Distribution supply.

Only Half of the Battle

- A good defense is only half of the battle. In order to win, a good offense is also a requirement.

Good Defense

- Standards are being created left and right.
- FARs and DFARs created
- Reams of requirements are being flowed to manufacturers and distributors
- Purchasing, Detection, Reporting and Correction
- Prevention policies, training, auditing and reporting
- Inspection and test lab business is booming.

Good Defense cont'd

- A huge industry has spawned as a result of this problem and the bulk of that industry revolves around containment, mitigation and prevention.

- Containment, mitigation and prevention are all commendable actions but they simply frame the true root cause and tend to divert the appropriate corrective actions.

Good Defense cont'd

- Where are accountability and responsibility being driven to stem the demand and who is driving it?
- Why has there not been a hard deadline established to get these parts out of critical defense systems?
- Cost? Of course it's cost.

2013 Net Earnings

- Boeing - $4.59B
- Lockheed - $3.0B
- Honeywell Aerospace - $2.42B
- UTC - $1.45B
- General Dynamics - $624M
- Raytheon - $467M

- It was a good year for some, not so good for others.

Root Cause

- As in any problem solving situation, you must first determine true root cause. Until you eliminate the true root cause, you are only addressing the ‘noise’ around the problem.
- Any root cause analysis that is performed on this problem will result in, ***there is demand for obsolete parts*.**

Good Offense

- Requirements are being flowed to sub-tier suppliers. Are the requirements to **consider, anticipate and manage obsolescence** in current designs being flowed?
- Please reference AS5553 Appendix A.
- Is there enough attention being given to AS5553 Appendix A?

Good Offense cont'd

- Is there enough attention being given to the requirement to design these parts out and incorporate current sustainable parts?
- Are the requirements to review the current BOMs for parts that have become/are becoming obsolete and/or EOL being measured and monitored?
- Diminishing Manufacturing Sources and Material Shortages (DMSMS) is a start.

Focus

- It is not new news that electronic components do not have a long production life cycle.
- Requirements are needed to procure adequate quantities of components now to sustain programs beyond projected end of life.

Focus cont’d

- There are times when authentic parts are not available from a Trusted Supplier. I’m not here today to talk about what you should do in that situation. I’m here to highlight the immediate urgency for helping eliminate the driver of this problem.

- Obsolescence is a key driver in the root cause of this issue.

Summary

- This ship has holes in it. Symptomatic holes that we keep trying to plug.
- It’s up to us to fix this before a ship sinks. Where we can’t immediately get new ships, we need to be moving towards replacing entire sections rather than continuing to insert plugs.
- We need more attention focused on designing obsolescent parts out.

Thank you!